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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,616	06/30/2000	Jayashankar Bharadwaj	042390.P8130	9458

7590 02/13/2006

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EXAMINER

KISS, ERIC B

ART UNIT	PAPER NUMBER
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2192

DATE MAILED: 02/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/608,616	BHARADWAJ ET AL.	
	Examiner	Art Unit	
	Eric B. Kiss	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36-71 is/are pending in the application.
- 4a) Of the above claim(s) 36-43 and 50-65 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 44-49 and 66-71 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>20050919</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 13 December 2005 has been entered.

Claims 36-71 are pending.

Claims 36-43 and 50-65 remain withdrawn from further consideration.

Claims 44-49 and 66-71 have been examined.

Response to Amendment

2. Applicant's amendment to claim 46 appropriately addresses the rejection under 35 U.S.C. § 112, second paragraph. Accordingly, this rejection is withdrawn.

Response to Arguments

3. Applicant's arguments filed 13 December 2005 have been fully considered but they are not persuasive.

Contrary to applicant's allegation, Kistler does indeed suggest collecting profile data including sampling the running of the executable code at a controlled rate. In subsection 2.5, Kistler determines that, "a sound profiling infrastructure has to support sampling profilers, instrumenting profilers, and hardware-based techniques." *Kistler*, p. 31. Further, the system implemented by Kistler uses a sampling profiler along with several instrumenting profilers, as discussed on p. 34, and presented in Table 2.4 on p. 35.

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 44-49 and 66-71 are rejected under 35 U.S.C. 102(a) as being anticipated by Thomas Kistler, "Continuous Program Optimization," 1999, Ph.D. thesis, Department of Information and Computer Science, University of California, Irvine, CA (hereinafter *Kistler*).

As per claim 44, *Kistler* discloses running executable code (see, for example, subsections 2.1 and 2.2); collecting profile data while the executable code is running (see, for example, subsections 2.4 and 2.5), wherein said collecting the profile data comprises sampling the running of the executable code at a controlled rate (see subsection 2.5); when the CPU is idle, processing the profile data (see, for example, p. 15, paragraph 2; p. 19, paragraph 2; and p. 61, paragraph 3); and recompiling software based on the processed profile data (see, for example, subsections 2.4, 2.6, and 2.7).

As per claim 45, *Kistler* further discloses processing the profile data comprising generating one or more profiles (see, for example, subsection 2.5).

As per claim 46, *Kistler* further discloses wherein generating the one or more profiles comprises generation of a binary level profile from analysis of the profile data (see, for example, subsections 2.4 through 2.6); and derivation of a profile at high level intermediate language from the binary level profile (see, for example, subsection 2.4, especially at p. 26).

As per claim 70, *Kistler* further discloses generating an initial profile database containing hardware configuration information (see, for example, subsection 2.6).

Claims 47-49 and 66-68 are machine-readable medium and system versions of the claimed method steps discussed above (claims 44-46). Claim 71 is a machine-readable medium version of method claim 70. Further, *Kistler* discloses the method being implemented on top of the Oberon System 3 for the Macintosh® platform (first paragraph of subsection 2.1) and further discloses implementing the method into continuous optimization framework for the PowerPC 604e™ superscalar out-of-order processor. The use of a machine-readable medium is considered inherent and necessary in arriving at and/or utilizing these implementations, and all other limitations have been addressed as set forth above.

As per claim 69, *Kistler* further discloses creating an annotation (see, for example, subsection 2.5).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric B. Kiss whose telephone number is (571) 272-3699. The Examiner can normally be reached on Tue. - Fri., 7:00 am - 4:30 pm. The Examiner can also be reached on alternate Mondays.


If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Tuan Dam, can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Art Unit: 2192

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature should be directed to the TC 2100 Group receptionist:
571-272-2100.

EBK/EBK
January 30, 2006



TUAN DAM
SUPERVISORY PATENT EXAMINER